

REMARKS

Claims 1-50 are pending in the present application with claims 4-6, 11, 12, 28-31 and 36 being withdrawn from consideration as being drawn to non-elected subject matter.

The Examiner has objected to the drawings as failing to show every feature of the invention. More specifically, the Examiner states that the two pressure plates recited in claim 13 and the means recited in claim 37 are not shown in the drawings. Claim 13 has been canceled without prejudice and therefore this objection is moot.

With respect to claim 37, Applicants respectfully submit that the claimed arrangement of this claim is shown in the drawings. More specifically, claim 37 can be interpreted to mean that the clutch disc 8 can be brought into friction engagement with the flywheel 6 and the pressure plate 9, with the pressure plate 9 being axially movable relative to the housing 7 and relative to the flywheel 6. The pressure plate is fastened to the flywheel 6 by means of the springs 10 in the circumferential direction and further, the pressure plate 9 can also be connected to the housing 7 by means of the springs 10. All of these components which can constitute the recited means that is illustrated in the drawings. Applicants therefore request reconsideration of this ground of objection.

The Examiner has further objected to the drawings because element 7 is allegedly not shown connected to the housing element 4. Applicants submits herewith an amended Fig. 3 for entry by the Examiner. The clutch housing 7 is not connected directly to the engine housing 4 but rather with the flywheel 6 (as is also shown in the

embodiment illustrated in Figure 7). The pressure plate 9, in turn, is connected to the flywheel 6 as well as to the clutch cover 7 by means of the leaf springs 10 in a rotationally fixed but axially movable manner. Thus, this ground of objection should be withdrawn based on the amendment to Fig. 3.

Claims 1-3, 7-10, 13-27, 32-35, and 37-50 stand rejected under 35 U.S.C. 112, second paragraph.

With respect to claim 1, the Examiner is confused as to how the cylinder is fixed and rotatable with reference to the housing. The slave cylinder 5 consists of the holder 18 which rotates together with the clutch cover 7. Arranged at the internal circumference is the bearing 14 which receives the slave cylinder housing 5 so that the latter is free to rotate. Thus, overall, the slave cylinder with the holder 18 has an axially fixed attachment to the clutch cover with the holder 18 rotating together with the clutch cover, and the slave cylinder housing has a rotationally fixed connection to the transmission housing 3 by means of a pin 5h that engages a groove 3b of the transmission housing 3. The connection 3b/5h only has to hold up under the drag torque of the two ball bearings 13 and 14. The piston 5a of the slave cylinder is likewise rotationally fixed in relation to the transmission housing 3. The diaphragm spring tongues 12a rotate together with the clutch cover 7 and the release bearing 13 is arranged between the clutch and the diaphragm spring tongues 12a. Applicants respectfully submit that this clarifies the how the slave cylinder 5 can be fixed and rotatable with reference to the housing.

Moreover, claim 1 has been amended to clarify this relationship since claim 1 recites that the at least one cylinder is mounted on the housing so that it is axially fixed while being rotatable with reference to the housing. Applicants respectfully submit

that this amendment further clarifies the nature of the cylinder and its relationship to the housing. In view of the foregoing, Applicants request withdrawal of this rejection.

With respect to claim 2, the cylinder is rotatable about the predetermined axis because it is mounted to the housing 7, which is rotatable about the predetermined axis. In view of the comments set forth above with reference to claim 1, Applicants believe this ground of rejection should be withdrawn.

Claim 17 has been amended and in view of the present amendment, the rejection of this claim should be withdrawn.

With respect to claim 37, Applicants respectfully submit that this claim can be interpreted to cover the arrangement where the clutch disc 8 can be brought into friction engagement with the flywheel 6 and pressure plate 9, with the pressure plate 9 being axially movable relative to the housing 7 and relative to the flywheel 6. The pressure plate is fastened to the flywheel 6 by means of the springs 10 in the circumferential direction and further, the pressure plate 9 can also be connected to the housing 7 by means of the springs 10. In view of these comments, Applicants respectfully contend that the recited means are disclosed in the specification.

Claim 41 is directed to the arrangement where a pilot bearing is arranged between the crankshaft 4a and the transmission input shaft 11. Prior to assembling the engine with the transmission, the pilot bearing can already be assembled on the transmission input shaft or on the crankshaft, with the crankshaft or transmission shaft, respectively, then being inserted in the pilot bearing when the engine is assembled with the transmission. In view of the foregoing, withdrawal of the rejection is in order.

Claim 42 recites again that the actuator housing 5b (i.e., the slave cylinder housing) is rotatably seated on the clutch housing 7 by way of the roller bearing 14. The slave cylinder housing 5b is axially fixed by way of the roller bearing 14 and the ring part 18 which, in turn, is axially fixed on the housing 7 by way of the connection 70.

Applicants believe that the present specification fully supports the claimed subject matter and the claim recites the arrangement with definiteness and particularity.

Reconsideration is respectfully requested based on the above comments and those set forth in the discussion of claim 1.

The Examiner has rejected a number of claims under 35 U.S.C. 102(b) as being anticipated by Checa. Applicants respectfully traverse this rejection on the following grounds.

The Examiner contends that the cited reference discloses a separable connection; however, Applicants respectfully submit that the cited reference does not stand for such a proposition. The release device in Checa is not separable. Although the clutch cover 22 is connected to the roller bearing 1b by means of a clip ring 70 that can be released, it is not possible to separate the release device 50 from the clutch cover within the confines of the clutch space during a repair in which the engine has to be separated from the transmission. Applicants further submit that the clutch disclosed by Checa is a pull-actuated clutch where the ball bearing 1a has axially fixed connections to the tongs of the diaphragm spring of the clutch. The ball bearing 1a, in turn, has an axially fixed connection to the piston of the slave cylinder by means of the end stop so that in order to separate the release device from the clutch cover during a repair, the entire transmission would have to be disassembled. The separation of the engine from

the transmission according to Checa would therefore have to be realized in such a manner that the clutch including the axial space filled by the release device can be pulled off the transmission input shaft. This can be a big disadvantage or it can even be impossible, especially if the axial space is limited in a confined installation arrangement of the engine/transmission unit.

To avoid the foregoing problem, the present application describes an arrangement that allows the release device to be separated in a simple manner from the clutch cover so that only the clutch with its shorter axial dimension has to be maneuvered off the transmission input shaft, which requires commensurately less axial space for separating the engine from the transmission.

Based on the foregoing, the rejection of claim 1 should be withdrawn since there is at least one feature that is not disclosed in the Checa reference.

The rejections of the dependent claims under 35 U.S.C. 103(a) are moot in view of the above comments as well as those set forth below.

Claims 2-3, 7-10, 14-18, 20-27 and 32-41 should be allowed as depending from what should be an allowed independent claim 1.

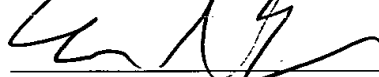
Claim 42 is an independent claim that recites a power train and includes an actor as well as means for separably coupling said actor with said housing. Applicants respectfully submit that for the reasons set forth above in detail in the discussion of claim 1, the Checa reference fails to include means for separably coupling the actor with the housing since the release device in Checa is not separable. For at least this reason, reconsideration and allowance of claim 42 are respectfully requested.

Claims 43-50 should be allowed as depending from what should be an allowed independent claim 42, as amended.

Allowance of claims 1-3, 7-10, 14-18, 20-27 and 32-50 is earnestly solicited at this time.

It is believed that the present Amendment is fully responsive to the outstanding Office Action. If there are any other issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

Respectfully submitted,



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MARKED UP COPY OF THE AMENDED CLAIMS

1. (Amended) A power train, comprising:
- an output member rotatable about a predetermined axis;
- a rotary input member; and
- means for transmitting torque between said input and output members,
- including
- an engageable and disengageable friction clutch having a housing rotatable with said output member about said axis,
- a rotary clutch disc arranged to rotate with said input member,
- [and]
- means for selectively coupling said clutch disc to said housing,
- including at least one cylinder and piston unit having at least one cylinder mounted on said housing [in a fixed position, as seen in the direction of the axis] so that it is axially fixed while being[, and] rotatable with reference to said housing; and
- means for separably coupling said at least one cylinder with said housing.
17. (Amended) The power train of claim 16, wherein an intermediate ring surrounds said bearing [surrounds said annular portion of said housing] and includes a feature for holding the bearing in an axially fixed position relative to the housing.

42. (Amended) A power train, comprising:

a prime mover having an output member rotatable about a predetermined axis;

a driven unit including a rotary input member coaxial with said output member; and

an engageable and disengageable friction clutch arranged to transmit torque between said input and output members and including

a housing rotatable with said output member about said axis,

a clutch disc disposed in said housing and affixed to said input member,

a pressure plate movable in the direction of said axis and arranged to rotate with and disposed in said housing,

an energy storing device disposed in said housing and operable to bias said pressure plate against said clutch disc to thus engage the clutch and establish a torque transmitting connection between said input and output members, [and]

means for engaging¹ said clutch including an actor rotatable with and axially fixed relative to said housing, said actor including means for moving said energy storing device relative to said housing; and

(10)(21)
means for separably coupling said actor with said housing.